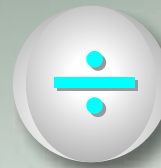
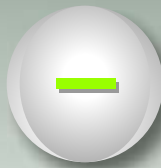


Titan-Genius Kidz National Arithmetic Championship

04 December 2009



Write in CAPITAL letters only

Category : JUNIOR

To be filled in by student

Name of the Student _____

Standard _____ Gender _____ Date of Birth _____

To be filled in by school

School's address with seal

School's Tel No. _____

Supervisor's name: _____

Supervisor's Sign. _____

General Instructions:

- o Duration of the competition is 30 minutes
- o Please use a ball point pen / gel pen / ink pen for writing the answers.
- o All questions DO NOT carry equal marks.
- o There is no negative marking for wrong answers
- o Attempt as many questions as possible within the given time.

For Official use only

Name of the Evaluator: _____ **Score:** _____

Signature of the Evaluator: _____



1. How much is:

1. $(6 - 1) \times (26 - 6) - 75 =$

2. $(42 \div (30 \div 5)) + (7 \times 3) =$

3. $(13 - 5) \div 2 + (6 - 1) =$

2. Which of the following fractions is an expression for the number zero?

- a) $\frac{0}{0}$ b) $\frac{1}{0}$ c) $\frac{0}{1}$ d) $\frac{1}{1}$

Ans:

3. $0 \times 1 + 1 \times 10 + 0 \times 0 + 1 =$

- a) 0 b) 1 c) 3 d) 11

Ans:

4. $1010 + 10100 = 10 \times ?$

- a) 101 b) 1010 c) 1020 d) 1111

Ans:

5. How many of the numbers 11, 21, 31, 41, 51, 61, 71, 81, 91 are prime numbers?

- a) 4 b) 5 c) 6 d) 7

Ans:

6. $\frac{2}{3} \times \frac{4}{5} \times \frac{6}{7} \times \frac{7}{6} \times \frac{5}{4} \times \frac{3}{2} =$

- a) 1 b) 3 c) 6 d) 12

Ans:

7. $(51 + 52 + \dots + 99 + 100) > (1 + 2 + 3 + \dots + 50)$ by how much?

- a) 2000 b) 2500 c) 2550 d) 5000

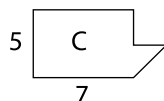
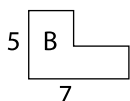
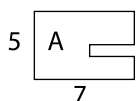
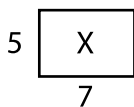
Ans:

8. The sum of the digits of all positive prime numbers less than 20 is

- a) 77 b) 76 c) 41 d) 40

Ans:

9. Which of figures A, B, or C has the same perimeter as figure X?



Ans:

10. If the following lengths are arranged from shortest to longest, which one would be in the middle?

- a) 7 feet b) 25 centimeters
 c) 3 meters d) 80 inches
 e) 1 kilometer

Ans :

11. If 2 pears weigh as much as 3 peaches and 2 peaches weigh as much as 30 grapes, then _____ pears weigh as much as 90 grapes.



- a) 4 b) 6 c) 8 d) 12.

Ans :

12. What is the total number of times the hour hand, minute hand and second hand go round a circular clock in one day?

- a) 144
 b) 1,440
 c) 1,466
 d) 86,400



Ans :

13. Of the following which is between $\frac{1}{2}$ and $\frac{3}{4}$?

- a) 0.2 b) 0.4 c) 0.6 d) 0.8

Ans :

14. I need 12 pieces of fruit to make 3 glasses of juice. How many pieces of fruit do I need to make 10 glasses of juice?



- a) 30 b) 36 c) 40 d) 120

Ans :

15. (number of 0s in 1 thousand) : (number of 0s in 1 million) =?

- a) 1:1 b) 1:2
 c) 2:3 d) 4:7

Ans :

16. Every _____ number has at least 1 even prime factor.

- a) Even b) odd c) prime d) whole

Ans :

17. Find the sum of the following **four** numbers:
three hundred fourteen million,
three hundred fourteen thousand,
fourteen hundred, and
three hundred fourteen.

Write your answer in number form

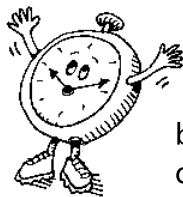
Ans:

18. The time _____ is 6 hours before 6 minutes after noon.

- a) 6:06 A.M b) 6:06 P.M c) 5:54 A.M d) 5:54 P.M

Ans:

19. The following are all factors of $30 \times 40 \times 50$ except



- a) $1 \times 3 \times 5$ b) $2 \times 4 \times 6$
 c) $5 \times 7 \times 9$ d) $6 \times 8 \times 10$

Ans:

20. The brochure said, "Watch your mail!" I watched for 5 days less than 5 weeks.

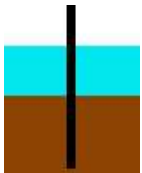
For how many days did I watch my mail?

- a) 10 b) 25 c) 30 d) 35

Ans:

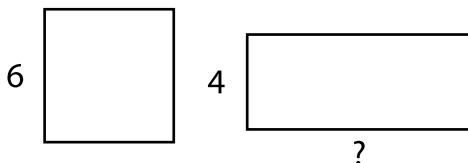


21. Imagine a straight wooden pole that is stuck in the mud at the bottom of a pond. There is some water above the mud and part of the pole sticks up into the air. One half of the pole is in the mud; $\frac{2}{3}$ of the rest is in the water; and one foot is sticking out into the air. How long is the pole?



Ans:

22. The areas of the square and the rectangle shown below are the same. What is the length of the rectangle?



Ans:

23. $\sqrt{100} = \sqrt{36} + \sqrt{?}$

- a) 2 b) 4 c) 16 d) 64

Ans:

24. $(301 + 302 + 303 + \dots + 325) - (1 + 2 + 3 + \dots + 25)$ is:

- a) 25 b) 2500 c) 5000 d) 7500

Ans:

25. Place the numbers 2, 5, 6, and 8 in the boxes to make the equation true.

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{23}{24}$$

26. Which integer represents this scenario?

2 students move away to a different school

- a) -2
b) 2

Ans:

27. Which of these is the smallest number?

- a) 0.625 b) 0.25 c) 0.375
d) 0.5 e) 0.125

Ans:

28. What is the largest prime number between 58 and 66?

Ans:

29. Your Piggy Bank

Dad gives you money every day to put in your new piggy bank.

If you already have 1 Rupee in the piggy bank and Dad gives you 1 Rupee the first day, 2 Rupees the second day, 4 Rupees the third day and so on, then your piggy bank gets full on the 11th day.



On which day will your piggy bank be half-full?

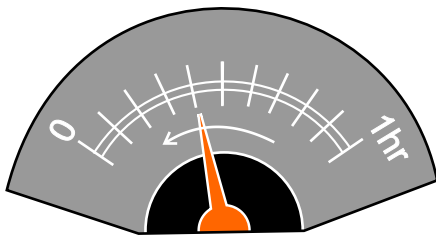
Ans:

30. A machine can fill 50 boxes of nails in 8 minutes. Each box contains 200 nails. How many boxes can the machine fill in one hour?

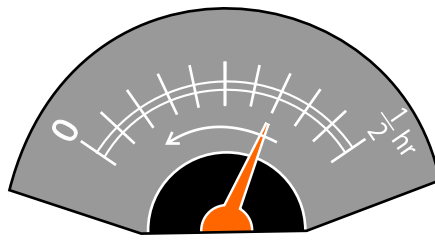


Ans :

31. Two parking meters are pictured with the "time" left as shown. How much more time is left on one meter than the other?



Meter A



Meter B

Ans :

32. Behind this cloud is a number with four digits.

What is it?

The number of thousands is $5.6 + 0.2 - 1 + 1.2$

The number of hundreds is $39 \div 13$

The number of tens is 12

The number of units is $810 \div 90$



Ans :

33. Jasmine is reading a book from cover to cover. She has finished $\frac{2}{3}$ of the book and has 102 pages left to read. How many pages has she read?



Ans :

34. Anisha found an old plank on the beach. She cut off 12 centimeters where the plank was broken. Then she cut the remaining plank into 3 equal pieces. Each piece is now 20 centimeters long. How long was the plank she found on the beach?



Ans :

35. A zoo has several ostriches and several giraffes. They have 30 eyes and 44 legs in total. How many ostriches and how many giraffes are in the zoo?



Ans :




36. The picture below has six rows. If this pattern were continued downward to have 12 rows, how many squares and how many happy faces would there be in the picture after the pattern is completed?



Ans : Faces :

Squares :

37. Figure this!

The cost of combination of frowns , smiles  & neutral faces  are shown.

How much is a smile worth?

$$\begin{array}{ccccccc} \text{smile} & + & \text{smile} & + & \text{frown} & = & \text{Rs.40} \\ \text{+} & & \text{+} & & \text{+} & & \end{array}$$

$$\begin{array}{ccccccc} \text{neutral} & + & \text{frown} & + & \text{frown} & = & \text{Rs.32} \\ \text{+} & & \text{+} & & \text{+} & & \end{array}$$

$$\begin{array}{ccccccc} \text{frown} & + & \text{smile} & + & \text{frown} & = & \text{Rs.35} \\ \text{+} & & \text{+} & & \text{+} & & \end{array}$$

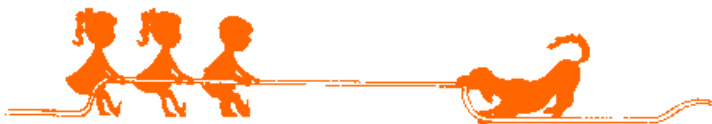
$$\begin{array}{ccccccc} \text{smile} & + & \text{frown} & + & \text{neutral} & = & \text{Rs.37} \\ \text{=} & & \text{=} & & \text{=} & & \\ \text{Rs.52} & & \text{Rs.50} & & \text{Rs.42} & & \end{array}$$

Answer:  = Rs.

38. In a tug of war, four boys can tug as hard as five girls.



Two girls and one boy can tug as hard as one dog.



The dog and three girls tug against four boys.



Which side will win the last tug of war?

Ans :